Strengthening U.S. Beef Export Markets: An Analysis of Consumer Willingness to Pay and Import Demand

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Strengthening U.S. beef export markets

Team

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Funding

- U.S. Department of Agriculture, National Institute of Food and Agriculture (Agriculture and Food Research Initiative: Economics, Markets and Trade)
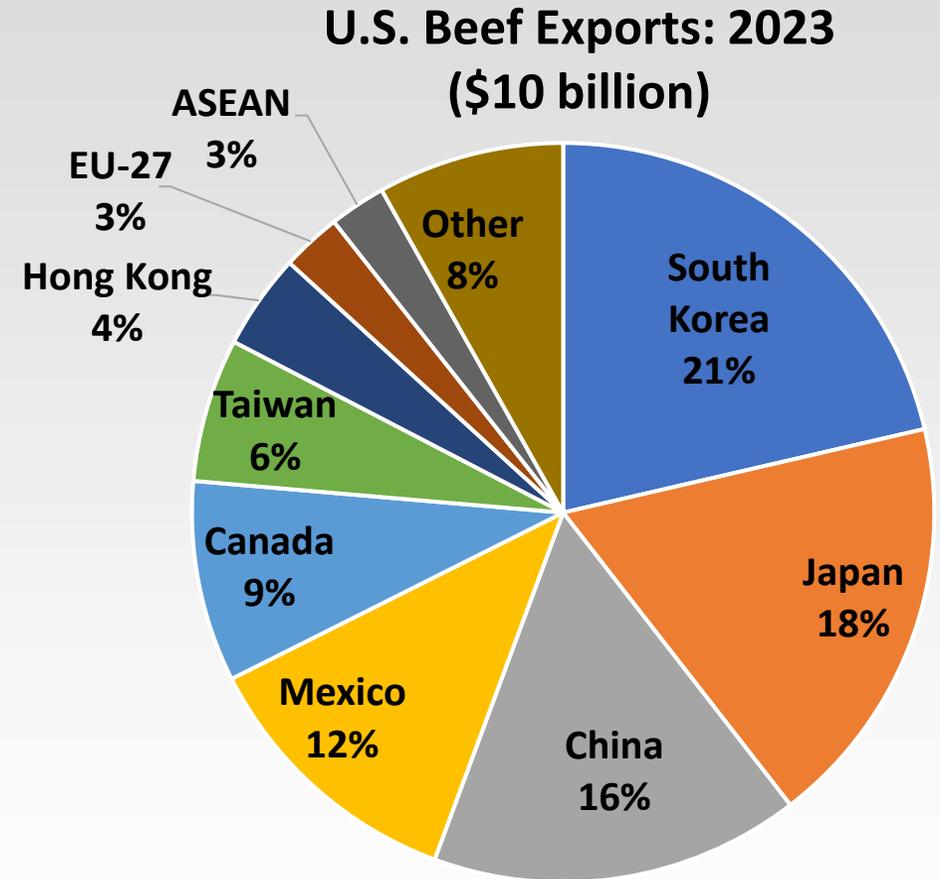
Website https://research.wpcarey.asu.edu/fab-lab/strengthening-u-s-beef-export-markets-analysis-of-consumer-willingness-to-pay-and-import-demand/

Introduction

- U.S. one of the largest beef exporters in the world

- U.S. beef exports in 2023
  - Valued at $10.0 billion
  - Accounted for more than 11% of total beef production

- Occurred even though the U.S.
  - Had been engaged in a trade war with China
  - Had withdrawn from Trans-Pacific Partnership (TPP)
  - Faced increasing competition from Brazil

Background on U.S. beef exports

- Japan
  - Despite withdrawal from TPP, U.S. negotiated bilateral trade agreement
  - Not full free trade agreement but same market access as CPTPP (e.g., Australia)

- Mexico
  - Trade is governed through U.S.-Mexico-Canada Agreement (USMCA)

- China
  - Opened market to U.S. beef in 2017 (now the 3rd leading U.S. market)
  - No trade agreement but trade war has subsided
  - Became largest beef importing country in 2019

- European Union (EU)
  - U.S. negotiated High Quality Beef (HQB) quota with the EU
  - Ban on beef treated with growth hormones problematic for U.S.

U.S. Beef Exports: 2023 ($10 billion)

Pie chart:
- South Korea 21%
- Japan 18%
- China 16%
- Mexico 12%
- Canada 9%
- Taiwan 6%
- Hong Kong 4%
- EU-27 3%
- ASEAN 3%
- Other 8%

Source: USDA, Foreign Agricultural Service (2024)

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Motivation and objectives

- **Provide insights regarding economic implications of changes in trade policies**

- **Provide information on how U.S. beef export market can be strengthened**

- **Assess consumer preferences and WTP**
    - For domestic and imported beef products
    - For other relevant attributes, e.g., no growth hormones administered, food safety certification

- **Assess beef demand**

Study design

Conducted choice experiments in Japan, Mexico, China, Germany, and the UK

- Collected data from over 3,500 consumers of beef in:
  - China in Summer 2021
  - Japan, Mexico, UK and Germany in Spring 2022
  - UK and Germany in Spring 2023

Conducted demand analyses

Coming up

1. Drivers of beef purchase behavior across countries (Dr. Karen DeLong)

2. Global insights into consumer willingness to pay for US beef: Case studies from China and Mexico (Dr. Shijun Gao)

3. Global insights into consumer willingness to pay for US beef: Case Studies from Japan, the UK and Germany (Dr. Carola Grebitus)

4. Future of U.S. beef demand and competitiveness in global markets (Dr. Andrew Muhammad)

Thank you for your attention!

Select project output

Publications.

- Gao, S., C. Grebitus, and K.L. DeLong. 2024. "Chinese Consumers' Willingness to Pay for Country-of-Origin Labeled Beef: The Role of Ethnocentrism, Country Image, and Product Image." *Canadian Journal of Agricultural Economics,* https://doi.org/10.1111/cjag.12359.
- Dahal, B.R., K.L. Delong, C. Grebitus, S. Gao, and A. Muhammad. 2024. "Factors Affecting Chinese Consumers' Beef Purchase Frequency." *Agribusiness: An International Journal,* http://doi.org/10.1002/agr.21906.
- Gao, S., C. Grebitus, and K.L. DeLong. 2023. "Chinese Consumer Preferences for Beef Quality Grades on Imported and Domestic Beef." *European Review of Agricultural Economics*, 50(3):1064–1102.
- Gao, S., K.L. DeLong, C. Grebitus, and A. Muhammad. 2022. "How Will the New Mexican Beef Grading System affect U.S. Beef Exports to Mexico?" *Arizona Food Industry Journal*, September 2022, p. 14.

Presentations.

- Dahal, B.R., K.L. DeLong, C. Grebitus, A. Muhammad and S. Gao. "Factors Affecting Chinese Beef Consumers' Purchases Frequency." Southern Agricultural Economics Association Annual Meeting. Oklahoma City, Oklahoma. February 5-7, 2023.
- Yonezawa, K., C. Grebitus, K.L. DeLong, and S. Gao. "Consumer Preferences for Country-of-Origin Labeling on Beef: Insights from Japan." Agricultural and Applied Economics Association Annual Meeting. Anaheim, CA. July 31- August 2, 2022.
- Gao, S., C. Grebitus, and K.L. DeLong. "Effect of Food Safety Concerns on Mexican Consumer Preferences for Beef from Different Countries." Agricultural and Applied Economics Association Annual Meeting. Anaheim, CA. July 31- August 2, 2022.
- Gao, S., C. Grebitus, and K.L. DeLong. "Promoting Food Quality of U.S. Beef in Mexico using a Discrete Choice Experiment." Agricultural and Applied Economics Association Annual Meeting. Anaheim, CA. July 31- August 2, 2022.
- Greer, C.D., A. Muhammad, and K.L. DeLong. "A Disaggregated Analysis of Beef Import Demand in Japan." Selected Presentation. Southern Agricultural Economics Association Annual Meeting. New Orleans, LA. February 12-15, 2022.
- Gao, S., P. Aceves, G. Martinez, A. Finkbeiner, C. Grebitus, and K.L. DeLong, A. Muhammad. "The Implications of COOL on Chinese Consumer's Perception of Domestic and Imported Beef Products." Selected Poster. Southern Agricultural Economics Association Annual Meeting. New Orleans, LA. February 12-15, 2022.

Completed Theses. Bhishma R. Dahal & Christina Greer (MS, U. of Tennessee), Shijun Gao (PhD, Arizona State U.)

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